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January 10, 2006

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Petition of Globalstar for Reconsideration in IB Docket Nos. 05-220 and 05-221

Dear Ms. Dortch:

The attached Petition of Globalstar for Reconsideration was filed with the Commission on January 9, 2005 as required by 47 C.F.R. § 1.106. However, the version filed did not include the Certificate of Service. Attached is complete copy of the petition for reconsideration along with the Certificate of Service.

Respectfully Submitted,

Nathan T. Mitchler
Counsel to Globalstar LLC

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Use of Returned Spectrum in the	)	IB Docket Nos. 05-220 and 05-221
2 GHz Mobile Satellite Service	)	
Frequency Bands	)	
	)	

PETITION OF GLOBALSTAR FOR RECONSIDERATION

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January 9, 2006

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SUMMARY

The Commission's rushed decision in the *December 9th Order* to reserve all of the 2 GHz mobile satellite service ("MSS") spectrum for two foreign-licensed companies (TMI and ICO) was ill-considered and inconsistent with settled law and policy.

The *December 9th Order* overstates the public interest benefits that might result from the reservation of all of the spectrum for TMI and ICO. As the Commission well knows, unlike TMI or ICO, Globalstar is already is providing vital communications services to first responders and other public safety officials – most recently in the wake of the hurricanes that struck the Gulf Coast and that destroyed most of the region's terrestrial communications infrastructures. Globalstar's service is a vital element of critical United States infrastructure, and its growth has been driven by the federal and state agencies, such as FEMA, the Department of Defense, and Homeland Security that depend on its service. Meeting these agencies' needs requires that Globalstar increase its service capabilities. The 2 GHz MSS spectrum that now has been reserved for two entities that have yet to provide similar public safety services is the only MSS spectrum available for the expansion of Globalstar's system. Accordingly, Globalstar and other MSS providers that need additional spectrum to continue to provide the vital services on which local, state, and federal public safety officials increasingly have come to depend are now left with no available spectrum to meet their growing customer needs.

The Commission's reservation of all of the spectrum for TMI and ICO conflicts with its own settled spectrum management policies and its statutory obligation to manage spectrum in a manner consistent with the public interest. Most glaringly, the *December 9th Order* abandons the Commission's longstanding policy favoring at least three competitors in a band in order to

maximize competition. The decision fails to square the creation of an artificial duopoly in the MSS marketplace at 2 GHz with that settled policy or to explain why the absence of competition in this band is in the public interest. The Commission s refusal to grant any other entity access to this spectrum is particularly troubling given that MSS providers with proven track records of providing vital MSS services, particularly Globalstar, stand ready, willing, and financially able to operate and compete in the 2 GHz MSS marketplace.

Neither TMI nor ICO has demonstrated any justification or need for more spectrum in the 2 GHz band. Each entity already holds 8 MHz of the available 2 GHz spectrum, and both have been proceeding with the construction of their MSS systems with no expectation that they would be granted more spectrum. Now, despite its prior conclusions in establishing the licensing regime for 2 GHz MSS systems that TMI s and ICO s original spectrum reservations were sufficient to support the development of their respective systems, the Commission has awarded each a spectrum windfall.

The Commission reasoned that it was creating spectrum reservations for TMI and ICO that were comparable to the spectrum holdings of other MSS providers. But that reasoning ignores the relationship between TMI and MSV, which the Commission has acknowledged are functionally one entity and should be treated as such for competitive purposes. In reality, the decision consolidates in the hands of TMI/MSV upwards of 40 MHz of prime spectrum, an allocation of spectrum that is now far greater than that available to any other MSS provider.

The Commission should reconsider its decision and retain 13.33 MHz of the 2 GHz MSS spectrum for Globalstar.

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PETITION OF GLOBALSTAR FOR RECONSIDERATION

Globalstar LLC ("Globalstar"), by its attorneys, and pursuant to § 405(a) of the Communications Act ("Act") and § 1.106 of the Commission's rules, hereby seeks reconsideration of the Commission's December 9, 2005 Order in these proceedings reserving all of the spectrum in the 2 GHz mobile satellite service ("MSS") band to TMI Communications and Company Limited Partnership ("TMI") and ICO Satellite Services ("ICO").[1/] As discussed below, the Commission's rushed decision to award all of the MSS spectrum in the 2 GHz band to TMI and ICO is unsupported by the record in these proceedings and is premature, inasmuch as the Commission has yet to rule on Globalstar's pending petition for reconsideration of the

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[1/] *See* Order, *Use of Returned Spectrum in the 2 GHz Mobile Satellite Service Frequency Bands*, IB Docket Nos. 05-220 and 05-221, FCC 05-204 (rel. Dec. 9, 2005) ("*December 9th Order*"). *See also* "Commission Invites Comments Concerning Use of Portions of Returned 2 GHz Mobile Satellite Service Frequencies," Public Notice, IB Docket 05-220, FCC 05-133 (rel. June 29, 2005) ("*First 2 GHz Public Notice*"); "Commission Invites Comments Concerning Use of Portions of Returned 2 GHz Mobile Satellite Service Frequencies," Public Notice, IB Docket No. 05-221, FCC 05-134 (rel. June 29, 2005) ("*Second 2 GHz Public Notice*") (collectively "*2 GHz Public Notices*").

cancellation of its 2 GHz MSS authorization, which was filed nearly 18 months ago. Furthermore, the Commission s decision to award all of the remaining 2 GHz MSS spectrum to two entities, one of which already holds more spectrum than it has demonstrated a need for, and the other of which has never provided MSS services, is wholly inconsistent with longstanding Commission precedent that strongly disfavors the creation of duopolies within a spectrum band. The Commission should revise its decision and make one-third of the 2 GHz spectrum available to Globalstar, an original 2 GHz license holder.

I. GLOBALSTAR STANDS READY, WILLING, AND FINANCIALLY ABLE TO LAUNCH A ROBUST AND VIABLE 2 GHZ MSS SYSTEM, AND NEEDS ONLY THE OPPORTUNITY.

In its unexplained haste to reserve *all* of the remaining 2 GHz MSS spectrum for TMI and ICO without fully considering alternative divisions of the spectrum, the Commission s *December 9th Order* flatly ignores the compelling case that Globalstar has made for reinstatement of its 2 GHz MSS authorization. It thus effectively denies Globalstar s ability to gain access to the expansion spectrum necessary to continue to grow its business. In 2004, the Commission declined to review the International Bureau s erroneous and unlawful cancellation of Globalstar s 2 GHz MSS license,[2/] an action that Globalstar has vigorously challenged ever since.[3/] As then-Commissioner Martin observed at the time of Globalstar s license cancellation,

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[2/] Memorandum Opinion and Order, *Emergency Application for Review and Request for Stay of Globalstar, L.P.*, 19 FCC Rcd 11548 (2004) (*denying review of* Memorandum Opinion and Order, *Application of Globalstar, L.P., For Modification of License for a Mobile-Satellite Service System in the 2 GHz Band*, 18 FCC Rcd 1249 (2003)).

[3/] *See* Globalstar, Petition for Reconsideration, File Nos. SAT-LOA-19970926-00151/52/53/54/56, *et al.* (filed July 26, 2004)(Petition for Reconsideration); Supplement to Petition for Reconsideration, File Nos. SAT-LOA-19970926-00151/52/53/54/56, *et al.* (filed Aug. 26, 2005) (Supplement to Petition for Reconsideration).

Globalstar specifically sought an opportunity to cure its satellite manufacturing contract to conform to the original [milestone] requirements should its modification and extension requests be denied.... It thus seems to me that Globalstar is being penalized for taking a more honest approach. [4/] Globalstar has demonstrated, among other things, that the revocation of its 2 GHz license violated the Act and failed to provide the required notice and hearing.[5/] Furthermore, the Commission provided no justification for the inconsistent application of its milestone policies, highlighted by the fact that the Commission granted 2 GHz licensees similar waivers to those sought by Globalstar, and the Commission failed to give Globalstar, which was in the midst of bankruptcy proceedings, an opportunity to revise its contract in accordance with the Commission s prescribed milestones.[6/]

Globalstar reiterates that the Commission s skepticism about Globalstar s intent and ability to proceed with the construction of a viable and robust 2 GHz MSS system is misplaced.[7/] The Globalstar satellite system has survived intact the Chapter 11 proceeding of the original Globalstar entity, and its new majority owners, Thermo Capital Partners, LLC, and the affiliated companies, Globalstar Holdings LLC and Globalstar Satellite LP, have infused substantial

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4/ *See* Consolidated Separate Statement of Commissioner Kevin J. Martin, Concurring in Part to June 24th Memorandum Opinion and Order.

5/ *See* Petition for Reconsideration at 5-20.

6/ *Id.* at 20-25.

7/ *See* Memorandum Opinion and Order, *Emergency Application for Review and Request for Stay of Globalstar, L.P.*, 19 FCC Rcd 11548, 11561-62 ¶ 31 (2004) (in which the Commission recognized that the Bureau was not convinced by Globalstar s . . . statements of its intent to proceed and had questions regarding whether Globalstar has the financial ability to proceed with its business plan.).

financial resources that, among other things, have made it possible for Globalstar to move forward with its 2 GHz business plan.[8/] Any reservations that the Commission may have had in mid-2004 about Globalstar s intent and ability to proceed with its 2 GHz system thus are unfounded. Globalstar stands manifestly ready and able to implement its 2 GHz system and will do so upon receipt of a share of the 2 GHz spectrum in conformity with the aggressive development and launch schedule that it recently filed with the Commission.[9/]

Globalstar is now in its sixth year of providing MSS voice and data services. Globalstar service currently is available in all areas of the world except central and southern Africa, Southeast Asia, and the Indian subcontinent, regions in which Globalstar currently is negotiating to expand coverage. As of December 2005, Globalstar had 195,000 subscribers in more than 120 countries, which reflects an average annual growth rate of 45 percent during Globalstar s first five years of service, and an astounding increase of 50 percent in the last 18 months alone. In April 2005, Globalstar filed an application for ancillary terrestrial component (ATC) authority that, once granted, will enable it to make more efficient and intensive use of its assigned spectrum and to enhance and broaden the invaluable services that it is providing to its public safety and other customers.[10/] At present, Globalstar is the only MSS provider capable of

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[8/] *See* Supplement to Petition for Reconsideration at 3-4.

[9/] *Id.* at 4-5 (presenting proposed milestones for implementation of a 2 GHz system that are equivalent to those imposed upon ICO). Of course, the Commission still has the opportunity to ensure that Globalstar can become a viable competitor in the 2 GHz marketplace, since, as the Commission made clear in the *December 9th Order*, the modifications of TMI s and ICO s spectrum reservations are necessarily conditioned on the outcome of Globalstar s pending petition for reconsideration. *See December 9th Order* at ¶ 63.

[10/] *See* Globalstar LLC Request for Authority to Implement an Ancillary Terrestrial Component for the Globalstar Above 1 GHz, of Big LEO, Mobile Satellite Service (MSS) System (Call Sign ES2115); Globalstar USA LLC Application for Modification of Blanket

implementing ATC immediately,[11/] and, when it receives ATC authority, Globalstar is poised to bring to reality all of the benefits that the Commission envisioned when it adopted the ATC rules.[12/] For instance, as the Commission recognized, Globalstar's MSS devices "can be combined with a miniaturized cellular switch or 'pico cell' site, so that emergency workers can use their existing standard cell phones to call anyone on the PSTN, or other workers within the radius of the pico cell."[13/] A 2 GHz spectrum authorization will allow Globalstar to continue its growth and specifically will enable it to innovate unconstrained by the technological limits of its existing system design.

Globalstar has proven that it can provide invaluable voice and data communications services to first responders and other public safety officials on a day-to-day basis and during times of emergency. The reliability and redundancy built into Globalstar's satellite system has earned it high praise. As noted in an industry publication, "Globalstar's satellite service today is providing a highly resilient, ubiquitous service that has proven itself during national emergencies

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License Authorization for Mobile Earth Station Terminals (Call Sign E970381); FCC File Nos. SAT-MOD-20050301-00054 and SES-MOD-20050301-00261.

11/ In fact, Globalstar demonstrated back in 2002 that its system *already* is capable of supporting ATC applications.

12/ *See, e.g.*, Space Daily, July 24, 2005, http://www.spacedaily.com/news/globalstar-02e.html (last visited Dec. 30, 2005) ("The combination of satellite and terrestrial infrastructure in a single system provides for an attractive solution for public safety and other applications that require dependable communications, both indoors and out, along with universal compatibility, where a single mobile phone unit can connect with virtually any other phone anywhere.").

13/ *See* Report To Congress on the Study To Assess Short-Term and Long-Term Needs for Allocations of Additional Portions of the Electromagnetic Spectrum for Federal, State and Local Emergency Response Providers, Submitted Pursuant to Public Law No. 108-458 (rel. Dec. 19. 2005) at n. 44 (*citing* Globalstar Press Release, "Globalstar Develops Wireless Emergency Management Communications System for Disaster Response," October 4, 2005, http://www.globalstar.com/en/news/pressreleases/press_display.php?pressId=384).

such as September 11 and the recent forest fires in the western U.S. where the terrestrial infrastructure was either damaged or simply unavailable. [14/] For example, during and after the recent hurricanes that struck the Gulf Coast, Globalstar s MSS system remained operational and Globalstar customers, many of whom are first responders and state and federal emergency response agencies, were able to maintain vital communications links. Globalstar provided approximately 10,000 *additional* handsets to public safety officials (including FEMA and the governor s offices in Louisiana and Mississippi) in the regions impacted by these storms within 30 days, and the company was able to shift its system capacity to meet the 500% surge in demand in the southeastern United States. In addition, in collaboration with FEMA, Globalstar designed and provided portable communications units containing multiple handsets and a central communication link so that FEMA would instantly have communication links upon arrival. Without Globalstar service, many state and federal agencies would have been left without communications links in the wake of these storms.

Globalstar s services effectiveness in these types of conditions is due not only to the fact that Globalstar s satellite constellation, which is located hundreds of miles above earth, is unaffected by ground-based disasters that can destroy terrestrial services,[15/] but also to the reliability of Globalstar s products, distribution channels, and customer service. Not surprisingly, a significant and increasing number of Globalstar s customers are federal agencies and public safety entities that have chosen an MSS solution for their communications needs

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[14/] Space Daily, July 24, 2005, http://www.spacedaily.com/news/globalstar-02e.html (last visited Dec. 30, 2005)

[15/] Globalstar s gateway earth stations are dispersed but have overlapping coverage areas. When a Globalstar gateway stands in the path of a hurricane, Globlastar can transfer coverage to unthreatened gateways for the duration of the storm.

because they recognize that they may not be able to rely on terrestrial networks during times of war or emergency – and that Globalstar can be counted on to meet the need. In addition to the 10,000 phones that Globalstar delivered following Hurricane Katrina, FEMA utilizes approximately 6,000 Globalstar simplex modem devices to track its inventory of fixed and mobile assets. At the federal level, Globalstar's customers also include Homeland Security, the Department of Justice, Secret Service, Customs and Border Patrol, the Drug Enforcement Administration, the Department of Defense, Department of State, and the National Security Agency. State and local governments are now seeking to ensure that Globalstar's satellite phones are made an essential component of their emergency response plans. Mississippi Governor Haley Barbour stated, "As a result of Globalstar's performance [during Hurricane Katrina], [Globalstar's] satellite phones are now a part of the State Emergency Response Team deployment package for future emergencies."[16/]

In light of the compelling showing that Globalstar has made in challenging the cancellation of its 2 GHz authorization and the undeniable public safety services that Globalstar is providing, it is vital that the Commission reconsider its decision to deny Globalstar access to any part of the 2 GHz MSS spectrum. Unlike the case with ICO, which has never provided MSS services, Globalstar has proven through years of experience that it is able to provide reliable, cost-effective satellite communications services to all who need them during times of emergency. TMI and its affiliate MSV also lack Globalstar's proven track record in this regard.

16/ Letter to Kevin J. Martin from Haley Barbour, Governor of Mississippi (Dec. 21, 2005).

II. THE COMMISSION'S FINDING THAT RESERVATION OF ALL OF THE 2 GHZ SPECTRUM FOR TMI AND ICO WILL BENEFIT PUBLIC SAFETY IS BOTH PREMATURE AND UNSUBSTANTIATED.

The Commission's decision in the *December 9th Order* to reserve all of the remaining 2 GHz MSS spectrum for TMI and ICO "so they can offer public safety services more quickly than would be possible if the spectrum were assigned to another party" has no basis in the record or in logic and fails to take into account the very real possibility that one or both of those entities may never deploy a 2 GHz MSS system. It also flatly ignores Globalstar's showings regarding the invaluable public safety services that Globalstar is providing today, along with Globalstar's demonstrated need for expansion spectrum – a need driven by federal and state customers, most of which provide public safety services.

As an initial matter, the Commission has vastly overstated the public safety benefits of its rushed decision to reserve all of the 2 GHz spectrum for TMI and ICO. Neither of those companies contributed significantly to hurricane relief in 2004 and 2005 – ICO because it does not operate and TMI because its equipment and services do not lend themselves to easy and reliable use in emergencies. Although the Commission recognized the important role of MSS telephones at the sites of the September 11, 2001 attacks and the vital services that MSS systems provided in the wake of Hurricanes Katrina, Rita, and Wilma[17/] and during the 2004 hurricanes, its conclusion that "assigning this spectrum to ICO and TMI will enable them to bring it into use more quickly, and [to] offer public safety services more quickly than would be possible if the spectrum were assigned to another party"[18/] is clearly wrong and without any support in the

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17/ *See December 9th Order* at ¶ 28 and ¶ 44.

18/ *Id.* at ¶ 28.

record. Unlike Globalstar and other operational MSS systems, ICO has absolutely no history of providing MSS to anyone, and TMI has never been the MSS choice for public safety and first responders in Canada, let alone the United States. It simply does not follow to assert that, because *existing* MSS providers have provided vital public safety and homeland security services, TMI and ICO will provide comparable services and will do it better or faster than the companies that have a proven track record. Equally unsubstantiated is the Commission s assertion that assigning the spectrum to only TMI and ICO will benefit rural and unserved areas. While Globalstar has taken significant steps and made substantial investment to reach out to unserved and rural areas, and provides voice and data service to a number of rural communities, there is absolutely no requirement in the Commission s existing 2 GHz MSS rules that TMI and ICO serve any of these areas.

In addition, as noted below, TMI and ICO already have sufficient spectrum to deploy viable 2 GHz systems, and are subject to construction milestones that ensure that the spectrum originally reserved for them will be put to use.[19/] Both are apparently constructing their 2 GHz satellites. Therefore, the Commission s suggestion that reserving more spectrum for their use in some way will speed the systems to market is illogical.[20/]

If the Commission truly were interested in ensuring the most expeditious deployment of MSS services at 2 GHz for public safety use, it should have made some of the spectrum available to MSS providers, such as Globalstar, that have actual experience and business plans, instead of reserving it all for two entities that, despite having held 2 GHz authorizations for four years, are

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19/ *See December 9th Order* at ¶ 35.

20/ *See December 9th Order* at ¶ 57 (Increasing ICO s and TMI s spectrum reservation does not affect their milestone requirements.).

still far from deploying 2 GHz MSS systems. As discussed below, Globalstar, unlike either TMI or ICO which can only hypothesize about the public safety services they *might* one day provide has a proven and growing track record of success in meeting the needs of first responders and other public safety officials.

III. THE ORDER FAILS TO JUSTIFY ITS DEPARTURE FROM SETTLED FCC POLICY FAVORING AT LEAST THREE COMPETITORS IN ANY BAND – A DEPARTURE THAT THREATENS THE FUTURE OF MSS AT 2 GHZ.

The Commission itself stated the established principle in its *December 9th Order*: There is a *presumption* that three satellite systems in a frequency band are sufficient to make reasonably efficient use of the frequency band. [21/] The Commission s decision to license only two competitors in the 2 GHz band thus departs from its own policy without explanation or justification. Furthermore, the Commission s decision contradicts its own Strategic Plan, which reaffirmed the long-held objectives that [t]he Commission shall foster sustainable competition across the entire communications sector [22/] and develop, advocate, and implement flexible, market-oriented spectrum allocation and assignment policies. [23/] Consistent with these reaffirmed goals and objectives, the Commission at least prior to the *December 9th Order* has found that it generally takes *at least three* competitors for a market to be competitive and that in most cases, if only two licensees exist in a band, an additional processing round should be held

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21/ *December 9th Order* at ¶ 12 (emphasis added).

22/ *See* Federal Communications Commission Strategic Plan 2006-2011, Sept. 30, 2005, at 8, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-261434A1.doc.

23/ *Id.* at 10.

to ensure the existence of a third competitor.[24/] That strong policy in favor of at least three licensees is also embedded in the Commission s space station licensing rules. In adopting those rules, the Commission acknowledged that the courts vigorously oppose mergers that create a duopoly,[25/] particularly where market entry is difficult, and declared:

> [T]he factors that have led courts to disfavor mergers to duopoly also support establishing a procedure that will maintain *at least three competitors in a frequency band*, unless an interested party can rebut our presumption that three is necessary to maintain a competitive market. To rebut this presumption, a party must provide convincing evidence that allowing only two licensees in the frequency band will result in extraordinarily large, cognizable, and non-speculative efficiencies.[26/]

The Commission s 2 GHz MSS licensing decision, in which eight providers were initially authorized, was fully consistent with these sound spectrum management policies, and with the Commission s vision of ensuring a competitive 2 GHz MSS marketplace. But the Commission already has taken steps that threaten the viability of existing and future MSS systems: In 2003, it reallocated 30 MHz of the 2 GHz MSS spectrum for terrestrial use, thus reducing the allocated 2 GHz MSS spectrum to 40 MHz, which equated to approximately 8 MHz of exclusive spectrum for each of the five providers then still holding 2 GHz licenses.[27/] Now the Commission has

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[24/] *See e.g.*, First Report and Order and Further Notice of Proposed Rulemaking in IB Docket No. 02-34, and First Report and Order in IB Docket No. 02-54, *Amendments of the Commission's Space Station Licensing Rules and Policies*, 18 FCC Rcd 10760, 10788-89 ¶ 64 (2003)(*Space Station Licensing Rules*) (*citing* Hearing Designation Order, *Application of Echostar Communications Corp., General Motors Corp. and Hughes Elec. Corp.*, 17 FCC Rcd 20559, 20604-05 ¶¶ 99-103 (2002)).

[25/] *See e.g., FTC v. H.J. Heinz Co.*, 246 F.3d 708, 717 (D.C. Cir. 2001); *FTC v. Staples, Inc.*, 970 F. Supp. 1066, 1081 (D.D.C. 1997).

[26/] *Space Station Licensing Rules*, 18 FCC Rcd at 10788-89 ¶ 64 (emphasis added).

[27/] *See* Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order, *Amendment of Part 2 of the Commission's Rules to Allocate*

deemed it appropriate to allocate all of the 2 GHz MSS spectrum exclusively to two licensees. And here, market entry is not merely difficult it is outright prohibited. The Commission s decision thus has essentially guaranteed that no additional competitors will enter the 2 GHz MSS market and that there will be no U.S.-licensed provider in the 2 GHz band, casting doubt on whether the spectrum will serve the needs of national security entities.

The *December 9th Order* fails to account for the fact that none of the possible public interest benefits associated with this spectrum will ever be realized if no 2 GHz MSS provider makes it to market. The marketplace may ultimately support fewer operators than were authorized; however, it is not the Commission s role to predict success or failure but rather to create an environment that will foster the optimum level of competition. The Commission s original decision to license eight providers in the 2 GHz MSS band was an important insurance policy and a conscious attempt to make certain that there would be ample competition within the band even if a number of providers were to succumb to competition or fail to meet applicable milestone deadlines due to market or other forces.[28/] By awarding all of the 2 GHz spectrum to only two entities, the shortsighted *December 9th Order* abandons this reasoning without a word of explanation. Given the enormous financial undertaking associated with the construction of a

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Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, 19 FCC Rcd 20720, 20761 ¶ 96 (2003). *See* Globalstar LLC, Petition for Reconsideration, filed in IB Docket No. 02-364, ET Docket No. 00-258, Sept. 8, 2004.

[28/] Report and Order, *Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, 15 FCC Rcd 16127, 16139 ¶ 18 (2000) (*2 GHz MSS Order*); *See* 47 C.F.R. § 25.157(g); *see also* Third Report and Order, Third Notice of Proposed Rulemaking and Second Memorandum Opinion and Order, *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services*, 18 FCC Rcd 2223, 2239-40 ¶ 32 (2003).

satellite system, there is no guarantee that either TMI or ICO will survive. Granting more spectrum to TMI and ICO than either of them originally anticipated receiving does nothing to increase the likelihood that either or both will meet the required construction milestones on which their licenses are conditioned, or ultimately construct operational systems. At the same time, by preventing an operational competitor, such as Globalstar, from gaining access to some portion of the 2 GHz spectrum, the Commission s decision greatly increases the likelihood that there might never be any operational MSS systems in the 2 GHz band. Unlike TMI or ICO, Globalstar already is providing robust MSS services, and has proven that it has a realistic, sustainable business model that enables it to provide reliable services at prices the market will bear. If either TMI or ICO fails to meet any of its construction milestones, then the Commission will have created a 2 GHz MSS marketplace comprised of a single provider. Worse still, if both fail, this will seal the fate of MSS at 2 GHz, and all but eliminate the benefits the Commission envisioned when it allocated 2 GHz spectrum for MSS. By licensing a third currently operational provider such as Globalstar in the 2 GHz spectrum, the Commission will do much more to ensure that the spectrum will be used for innovative, next generation MSS services.

The Commission s only stated basis for this departure from settled policy is that existing MSS providers in other spectrum bands should be considered to be in the same market with the 2 GHz MSS licensees.[29/] That rationale is itself a radical departure from Commission policy. In 2003 the Commission considered licensing additional Big LEO MSS systems to encourage competition and the efficient use of that spectrum band, but it did not make any mention of the eight providers it had just licensed in the 2 GHz band as being in the same market with the Big

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29/ *See December 9th Order* at ¶ 33.

LEO providers.[30/] The 2 GHz band has different technical characteristics from the bands currently used for MSS services. It is more desirable spectrum from the standpoint of freedom from potentially interfering authorized uses.[31/] In addition, the existing MSS services provided by Globalstar and Iridium employ multi-satellite NGSO constellations, while the systems proposed at 2 GHz employ single GSO satellites. How these and other differences between the spectrum bands will play out in practice cannot be predicted with any certainty. MSS services at 2 GHz will no doubt compete to some extent with MSS services in other bands, just as some degree of competition exists between other wireless services, such as Personal Radio Services, paging services, and Commercial Mobile Radio Services (CMRS) and, for that matter, between CMRS and wireline services. But the many uncertainties about cross-band competition underscore the soundness of the Commission s policy of seeking to have at least three competitors *in a frequency band.* [32/] The *December 9th Order* fails to justify the reversal of that settled policy.

The decision to create a duopoly at 2 GHz also runs counter the Commission s public interest obligation to foster robust competition in the market for MSS services. Among other

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30/ *See* Report and Order and Notice of Proposed Rulemaking, *In the Matter of Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands; Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands*, 18 FCC Rcd 1962, 2091 ¶ 271 (2003).

31/ For example, Globalstar is required to afford protection to both the Radio Astronomy Service (RAS) in-band and the Global Navigation Satellite System (GPS and GLONASS) in an adjacent band, and in 2004 the Commission required that Globalstar share a portion of its licensed spectrum with Iridium. *See* Fourth Report and Order and Order and Further Notice of Proposed Rulemaking, *Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Systems in the 1.6/2.4 GHz Bands*, 19 FCC Rcd 13356 (2004).

32/ *Space Station Licensing Rules*, 18 FCC Rcd at 10788-89 ¶ 64 (emphasis added).

goals, creating competition in a given spectrum band is necessary to incent the providers in that band most effectively and quickly to utilize the spectrum they have been allocated. Now that the Commission has decided that only two entities will have exclusive access to the entire 2 GHz MSS spectrum there is very little market-based incentive for either of these licensees quickly to utilize the spectrum. Going forward, the only direct competition TMI and ICO will face is from each other. The speculation that their services may to a degree be comparable to and competitive with the currently operating MSS systems will do little to motivate either TMI or ICO quickly to utilize the 2 GHz spectrum in furtherance of the public interest. And, as noted above, since there can be no guarantee that ICO or TMI will ever provide service in this spectrum, the Commission has now created a substantial risk that the 2 GHz MSS band will *never* be characterized by any competition at all.

IV. THE RECORD BEFORE THE COMMISSION DOES NOT SUPPORT THE RESERVATION OF ALL OF THE REMAINING 2 GHZ SPECTRUM FOR TMI AND ICO.

The Commission s decision in the *December 9th Order* to reserve all of the remaining 2 GHz MSS spectrum for TMI and ICO completely disregards the showings by commenters in response to the *2 GHz Public Notices* that neither of those entities has justified the award of additional spectrum beyond what they already have been assigned.[33/] As the Commission is aware, both TMI and ICO were prepared and committed to launch 2 GHz MSS systems with as little as 5 MHz (and, more recently, with 8 MHz).[34/] Their comments in these proceedings, on

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33/ *See e.g.*, Comments of Inmarsat Ventures Limited to *First 2 GHz Public Notice*, filed July 13, 2005, at 15-25; Comments of CTIA to *First 2 GHz Public Notice*, filed July 29, 2005, at 3-9.

34/ *See December 9th Order* at ¶ 35.

which the Commission relied in reaching its recent decision, do nothing to support the reservation of additional spectrum for either entity at this time. To the contrary, the *December 9th Order* simply creates an unjustified spectrum windfall for TMI and ICO, while flatly ignoring the compelling case that Globalstar has made as to why it should be granted access to additional spectrum.

Globalstar has a demonstrated need for additional spectrum that cannot and will not be met without access to a portion of the 2 GHz spectrum that the Commission has reserved for TMI and ICO.[35/] The spectrum originally assigned to Globalstar at 2 GHz is the only expansion spectrum available to it. As Globalstar and others noted in their comments filed in response to the *2 GHz Public Notices*, the 2 GHz band is essential to accommodate the continued growth of existing services, as well as the deployment of new and innovative services.[36/] In particular, Globalstar anticipates that 2 GHz MSS spectrum will be essential to enable it to provide wireless broadband services, for which, as the Commission itself has suggested, satellite networks are ideally suited.[37/] In addition, as noted above, 2 GHz spectrum will enable Globalstar to innovate unconstrained by the technological limits of its existing system design.

Globalstar currently provides MSS service using its constellation of over 40 NGSO

35/ *See, e.g.*, Globalstar Comments to *Second 2 GHz Public Notice* at 3-4.

36/ *See, e.g.*, Comments of Inmarsat Ventures Limited to *First 2 GHz Public Notice*, filed July 13, 2005, at 11.

37/ *See, e.g.*, Fifth Report and Order in IB Docket No. 00-248, and Third Report and Order in CC Docket No. 86-496, *2000 Biennial Regulatory Review Streamlining and Other Revisions of Part 25 of the Commission's Rules*, 20 FCC Rcd 5666, 5666 ¶ 1 (2005) ("Satellite-provided broadband Internet access services may provide one of the best potential options for millions of subscribers in the near term... Promoting high speed Internet service is a goal that has been enthusiastically endorsed by the Commission.").

satellites at the 1.6/2.4 GHz band. The 40-50 percent in new customers Globalstar is adding per year and the bandwidth demands of providing new services necessitate that Globalstar deploy additional capacity to expand its service offerings and meet customer needs. To offer broadband service effectively, as well as continue to provide reliable voice and data services, Globalstar needs additional spectrum. The 2 GHz MSS spectrum is presently the only available MSS expansion spectrum, and it will enable Globalstar to increase its broadband services and still continue to meet the voice and data needs of its existing customers. It will be difficult, if not impossible, for Globalstar to offer higher data rates to more customers and support innovative products without the 2 GHz MSS authorization. For example, without adequate expansion spectrum, Globalstar may be unable to ensure that its services are fully compatible with third generation terrestrial technologies, such as cdma2000 and W-CDMA, or to deploy additional broadband services to aircraft and mobile units on the ground, all of which will dramatically increase the availability of advanced broadband services.

The Commission appears to have taken into account none of these considerations in concluding that the public interest would be served by granting only TMI and ICO access to all of the 2 GHz spectrum. Instead, it relied on TMI s and ICO s vague and unsubstantiated declarations that without additional spectrum they will be unable to provide a viable MSS service. But those assertions are completely inconsistent with the historical facts that, in the past, the Commission has emphasized that as little as 5 MHz of spectrum would be adequate for an MSS provider to launch operations,[38/] and that both TMI and ICO were prepared and committed to launch 2 GHz MSS systems using no more than 5 MHz (and most recently, prior to the

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38/ *2 GHz MSS Order* at 16138-39 ¶ 17.

December 9th Order, using 8 MHz). The Commission has pointed to no change in circumstances to support an increase in TMI s or ICO s spectrum needs.

V. THE DECEMBER 9TH ORDER FAILS TO CONSIDER THE CORPORATE RELATIONSHIP BETWEEN TMI AND MSV.

In support of its decision to reserve all of the remaining 2 GHz spectrum for TMI and ICO, the Commission stated that the additional assignments to ICO and TMI are thus fairly conservative when compared with other MSS spectrum assignments. [39/] The Commission also reasoned that ICO and TMI were not given a reasonable opportunity to increase their spectrum assignments in the secondary market as NGSO-like satellite operators have been allowed to do. [40/] However, in concluding that, as a result of the *December 9th Order*, TMI will have access to only 20 MHz of MSS spectrum, the Commission completely disregarded its own prior findings (and well as common industry knowledge) that TMI and Mobile Satellite Ventures Subsidiary LLC (MSV) are, in fact, a combined Canadian-American regional MSS system, [41/] which will now have access in all of North America to TMI s 20 MHz of 2 GHz spectrum, *as well as* MSV s 20-28 MHz of L-band spectrum.[42/] Contrary to the Commission s

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39/ *See December 9th Order* at ¶ 37.

40/ *Id.* at ¶ 38.

41/ *See* Order and Authorization, *Motient Services, Inv. and TMI Communications and Company, LP, Assignors, and Mobile Satellite Ventures Subsidiary LLC, Assignee*, 16 FCC Rcd 20469, ¶¶ 5-6 (2001).

42/ MSV has designed its satellites to use 28 MHz of L-band spectrum, but thus far the U.S. had only been able to coordinate 20 MHz internationally. *See* Report and Order, *Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Services in the Upper and Lower L-band*, 17 FCC Rcd 2704, 2724 ¶ 45 (2002). The Commission recently rejected MSV s request to operate the additional 8 MHz of L-band spectrum on purely procedural grounds. *Mobile Satellite Ventures LLC*, DA 05-1392, at ¶¶ 13-14 (rel. May 23, 2005).

conclusion that reserving a full 20 MHz of MSS spectrum for TMI will merely enable that entity to become [an effective competitor] in the MSS segment of the mobile telecommunications services market, [43/] the Commission s action instead grants a single MSS provider what amounts to *far more* spectrum than is held by any other MSS licensee serving the U.S. market.

The Commission has recognized for many years that TMI and MSV should be viewed for competitive purposes as a single MSS provider. In 2001, in approving the applications of Motient Services, Inc. and TMI to assign certain space and earth station authorizations to MSV, the Commission recognized that the three entities sought to establish a combined Canadian-American regional MSS service that would be controlled by MSV and TMI.[44/] Similarly, in canceling TMI s 2 GHz spectrum reservation (an action which the Commission later reversed), the International Bureau noted that, pursuant to a joint venture agreement into which it has entered with MSV on January 8, 2001, [TMI] agreed to transfer its 2 GHz MSS authorization to MSV LP, or a subsidiary, at MSV LP s election. [45/] Again, in reinstating TMI s authorization, the Commission recognized that TMI had agreed to assign its then-pending 2 GHz LOI request, or an ensuing reservation of spectrum, to MSV LLC or a designated subsidiary thereof. [46/] And

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43/ *See December 9th Order* at ¶ 33.

44/ *See* Order and Authorization, *Motient Services, Inv. and TMI Communications and Company, LP, Assignors, and Mobile Satellite Ventures Subsidiary LLC, Assignee*, 16 FCC Rcd 20469, 20471 ¶¶ 5-6 (2001).

45/ *See* Memorandum Opinion and Order, *TMI Communications and Company, Limited Partnership Request for Modification of Spectrum Reservation for a Mobile-Satellite Service in the 2 GHz Bands*, 18 FCC Rcd 1725, 1727 ¶ 5 (2003).

46/ *See* Memorandum Opinion and Order, *TMI Communications and Company, Limited Partnership and TerreStar Networks, Inc., Application for Review and Request for Stay*, 19 FCC Rcd 12603, 12609 ¶ 14 (2004).

most recently, in authorizing MSV to launch and operate its next-generation L-band satellite to provide service between South America and the United States, the Commission yet again acknowledged that Motient and TMI intended to consolidate their U.S. L-band MSS operations within MSV.[47/] Finally, recent ownership information on file with the Commission,[48/] press reports,[49/] and MSV s own Web site make abundantly clear that TMI and MSV are functionally affiliates of one another, and their individual spectrum holdings should be aggregated for purposes of any competitive analysis.[50/]

Today, TMI s entire business consists of holding its two Canadian licenses for MSAT-1 (L-band) and CANSAT-M3 (2 GHz) and its investment in the Motient/Mobile Satellite Ventures group of companies. In its press releases and other literature, TMI refers to itself as TMI/TerreStar in furtherance of the transition to a single North American MSS system under the MSV and TerreStar brands. TMI does not sell service either in the U.S. or Canada. Its

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47/ *See* Order and Authorization, *Mobile Satellite Ventures Subsidiary LLC*, 20 FCC Rcd 479, 479-80 ¶ 2 n. 3 (2005).

48/ *See, e.g.*, Mobile Satellite Ventures Subsidiary LLC, Application for Modification of License to Operate ATC, FCC File Nos. SAT-MOD-20051104-00212, SAT-MOD-20051104-00211, SES-MOD-20051110-01561, at Exhibit B (filed Nov. 4, 2005) (disclosing Motient Corporation and subsidiaries 48.8% interest in MSV s corporate parent, Mobile Satellite Ventures LP.).

49/ *See* Motient Invests $200 Million In Mobile Satellite Operation, Space Daily (May 12, 2005); "Motient Announces Transaction with Owners of Mobile Satellite Ventures and TerreStar Network, Space NewsFeed (Sept. 22, 2005). Indeed, TMI s own press statement following the release of the *December 9th Order*, in which it describes itself as the first-to-market company for MSS/ATC technology, makes clear that it views MSV s ATC authorization as though it were its own. *See* Fact Sheet: TMI/TerreStar and the Future of Mobile Communications, http://www.terrestarnetworks.com/files/Fact_Sheet_12-12-05.pdf (last visited Jan. 4, 2006).

50/ We have attached the relevant pages as Appendix 1 for convenience. Apparently, MSV now refers to its AMSC-1 satellite as MSAT-2 in its sales and marketing literature. MSAT-1 is TMI s Canadian-licensed L-band satellite.

service in both countries is distributed through affiliates of MSV and independent distributors such as Stratos. In an age when services and products are increasingly distributed over the Internet, the Web sites *www.tmi.ca* and *www.tmisolutions.com* have been abandoned and replaced by Web sites operated by MSV or TerreStar.

In light of the unavoidable fact that for all competitive purposes TMI and MSV must be treated as one and the same, the *December 9th Order* is simply wrong in declaring that the reservation of additional spectrum for TMI makes its effective holdings comparable to those of other MSS providers, such as Globalstar. Indeed, the *December 9th Order* does not show that the Commission even considered the relationship between TMI and MSV or its impact on competition in the MSS market. The Commission s suggestion that it was providing only 20 MHz of MSS spectrum to TMI cannot be squared with the fact that it was consolidating at least 40 MHz and perhaps 48 MHz of MSS spectrum in the hands of two entities that for competitive purposes are a single provider. As a result of the *December 9th Order*, TMI and its partners now will control far more MSS spectrum than any other MSS provider, and the Commission s statement that it was creating roughly equivalent spectrum allocations among MSS licensees is simply wrong.

CONCLUSION

For these reasons, it is vital that the Commission reconsider its flawed decision to reserve all of the 2 GHz MSS spectrum for TMI and ICO.

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January 9, 2006

ABOUT MSV
Corporate Profile
Senior Management
MSV Network
Careers

CUSTOMER SOLUTIONS
Voice and Dial-up Data
Dispatch Radio
Fax
Packet Data
Future Services
Satellite Capacity
The MarketPlace

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Application Developers
MSV Dealers
Other Associates
Partners Only

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- Executive Bios
- Photos
- Product Literature
- Style Guide

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For more information call
1-800-216-6728
info@msvlp.com

COMPANY FACT SHEET

View PDF Version (1,034KB)

CORPORATE OVERVIEW

Mobile Satellite Ventures:

- MSV is currently authorized to use approximately 28 MHz of coordinated North American spectrum in a terrestrial wireless network with an integrated satellite overlay to provide ubiquitous and enhanced services
- MSV is working with leading technology vendors to develop this powerful next generation hybrid wireless network that will provide ubiquitous high bandwidth coverage in every market of North America
- This network will utilize a powerful satellite constellation working in unison with MSV's patented ancillary terrestrial component (ATC) technology to deliver seamless wireless services to its end-users over standard wireless devices
- MSV holds the first FCC authorization to enhance its satellite system with an ATC network
- Currently, MSV is North America's premier provider of mobile satellite communications services, offering a wide choice of wireless data, voice, fax and dispatch radio services via its two existing satellites
- MSV is cash generative under its existing business

CURRENT INVESTORS

Motient Corporation (OTC: MNCP.PK)
SkyTerra Communications (OTC BB: SKYT.OB)
TMI Communications (a subsidiary of BCE Inc.)
Columbia Capital

MSV NETWORK

The MSV Network infrastructure is made up of the following major components:

Current:

- 2 satellites: The MSAT-1 and MSAT-2 (currently licensed in Canada)
- A 24/7 Network Operations Center (NOC)
- MSV has 99.9% network availability, reflecting its quality systems, proprietary software, and staff

Next Generation Network Plan:

- MSV plans to launch a three-satellite configuration: MSV-1 (U.S.), MSV-2 (Canada) and MSV-SA (South America)
- Most powerful commercial satellites ever deployed, enabling multi spot-beam frequency re-use and communication with standard cellular handset when out of terrestrial coverage

SERVICE

Coverage and Markets:

- MSV provides superior capacity and reliability for customers across North America, northern South America, Central America, the Caribbean, Hawaii and in coastal waters
- Serves the following markets: Public Safety/Homeland Security, Emergency Response, Military, Coast Guard, Police, Trucking, Rail, Oil and Gas, Marine, Natural Resources, Utilities

STRATEGIC PLAN

- Select premier satellite system suppliers to embark on new phase of next generation ubiquity
- Potential partners: In advanced discussions with mass-scale telecom and media players seeking to deploy advanced wireless technologies, existing network operators, technology players
- Exploration of further international expansion

PATENT PORTFOLIO

MSV has the most dominant ATC patent portfolio in the world:

- Earliest (1991)
- Deepest (4,000+ claims)
- Broadest (all system components)
- Worldwide (U.S., Mexico, Canada, Europe, Australia and others)

COVERAGE AREA

MSV provides wireless communications on land, sea, or in the air across North and Central America, northern South America, the Caribbean, Hawaii and coastal waters.

MANAGEMENT TEAM

Gary Parsons	Chairman
Alexander Good	Vice Chairman and Chief Executive Officer
Mark W. Faris	Chief Operating Officer
Carson Agnew	Executive Vice President, Satellite Operations & Development
Eric Swank	SVP, Chief Financial Officer and Treasurer
Monish Kundra	SVP, Corporate Development
Randy Segal	SVP, General Counsel
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SPACE SEGMENT

The space segment is composed of the MSAT-1 and MSAT-2 satellites. These geostationary satellites are in orbit 36,000 kilometers (approx. 22, 400 miles) above the earth matching the earth's rotation, thus maintaining fixed positions over North America.

The MSAT satellites operate in a similar manner to a cellular microwave repeater, but have a much greater range. Using the MSAT spot beam technology, MSV offers superior coverage and capacity. This technology turns all of North and Central America, northern South America, the Caribbean, Hawaii, and coastal waters into a single, digital communications cell. As a result, MSV can deliver to users in its coverage area advanced and affordable wireless communications from anywhere to anywhere, on land, at sea, or in the air.

The satellite's on-board telecommunications payload is capable of handling thousands of simultaneous secure and reliable voice calls and data transmissions. The MSAT satellites bring the benefits of telecommunications and information to areas without access to conventional land-based telecom networks and make it ideally suited to the unique needs of the transportation, utility, oil & gas, government, maritime, and resource industries.

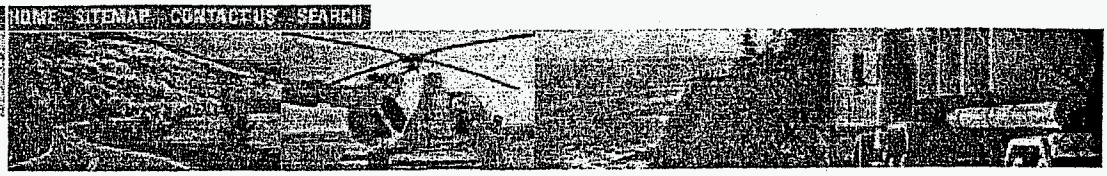
Technical Data

The MSAT Satellites were constructed by SPAR Aerospace Limited of Mississauga, Ontario and Hughes Space and Communications Co. of Los Angeles. Each satellite's specifications are as follows:

Size	At launch: 2.5 meters x 3.5 meters x 7.9 meters With reflectors and solar arrays deployed: 16.25 meters x 21 meters
Mass	At launch: 2850 kilograms (Beginning of life): 1720 kilograms Dry mass: 1330 kilograms
Primary Power	3.3 kilowatts of electrical power generated by two 3-panel solar arrays 25-cell nickel-hydrogen battery
Propulsion system	Bipropellant with integral 110 lbf apogee motor and 12 x 5-lbf thrusters
Design life	10 years
Frequency Bands	Satellite Transmit (downlink): Service band: 1530-1559 MHz Feederlink: 10.75-10.95 GHz Satellite Receive (uplink): Service band: 1631.5 - 1660.5 MHz Feederlink: 13.0 - 13.15, 13.2 - 13.25 GHz

L-band Antenna	Two 5.7 x 4.7 meter mesh reflectors
Transponders	Two Ku-band to L-band forward link repeaters One L-band to Ku-band return link repeater
Power Output	L-band: 600 watts provided by 16 solid-state power amplifiers (SSPA's) Ku-band: 110 watts L-band aggregate effective isotropic radiated power (EIRP): 57.3 dBW at edge of coverage
Launch Services	Arianespace for MSAT-1 Panamsat for MSAT-2
Satellite Operation and Maintenance	Telesat Canada

Click here for more in-depth technical information.



For more information call
1-800-216-6728
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GROUND SEGMENT

Mobile Satellite Ventures' MSAT-1 and MSAT-2 satellites are the heart of the MSV network, but the ground segment, commonly referred to as the Communication Ground Segment (CGS) is its nervous system, providing the links to terrestrial public and private phone and data networks.

One CGS is located in Ottawa, Canada and interacts with MSAT-1 and MSAT-2, while the other CGS is located in Reston, Virginia, USA and interacts with MSAT-2.

Phone calls and data transmissions from MSV subscribers are relayed by the satellite to MSV's Communications Ground Segments (CGSs) which house the Network Operations and Network Control Center.

Supplied to MSV by Westinghouse Electronic Systems Group, the CGSs are the nerve centers of the MSV Network. They process all calls providing full connectivity to public and private phone and data networks, linking subscribers to anyone, anywhere in the world.

Voice calls and data transmissions from users are relayed directly from MSV mobile terminals via L-Band to the satellite, then down to a CGS via Ku-Band. Each CGS consists of:

- an 11-meter satellite dish
- the Feederlink Earth Station, which provides connectivity to the public switched telephone networks (PSTN)
- customer owned equipment for private-network customers

The CGS in Ottawa also has:

- a second satellite dish, a 7-meter one, so that it can access both satellites
- a Data Hub which provides connectivity to public and private data networks also offering an IP gateway
- the Network Operations Center, where the network is monitored and controlled
- the Network Communications Controller, which allocates channels on a per-call basis

CERTIFICATE OF SERVICE

I, Nathan T. Mitchler, hereby certify that on January 9, 2006, I caused to be served a copy of the foregoing Petition of Globalstar for Reconsideration by first-class U.S. mail upon the following:

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